REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion is respectfully requested.

Claims 1-12 are currently pending in the application. Claims 1 and 7 are amended by the present amendment. Support for amended Claims 1 and 7 can be found in the original specification, claims and drawings.[1] No new matter is presented.

In the outstanding Official Action, Claim 1-3, 5-9 and 11-12 were rejected under 35 U.S.C. §102(b) as anticipated by Kurumisawa et al. "Development of an Optical Distortion Measuring Technique" (1999) (hereinafter "Kurumisawa"). Applicant respectfully traverses this rejection, as amended independent Claims 1 and 7 state novel features clearly not taught or rendered obvious by Kurumisawa.

Independent Claim 1 is directed to a method for evaluating the dynamic perspective distortion of a transparent body by obtaining a plurality of distance values between adjacent perspective evaluation points and selecting a reference value from among the plurality of distance values. The dynamic perspective distortion of the transparent body is then evaluated by obtaining ratios of each of the plurality of distance values to the reference value.

Specifically, Claim 1 recites, *inter alia*, a method for evaluating the dynamic perspective distortion of a transparent body, comprising:

> "...obtaining a plurality of distance values between a plurality of adjacent perspective evaluation points;
> determining a ***reference value, among the plurality of distance values***, and
> evaluating the dynamic perspective distortion of the transparent body by ***obtaining ratios of each of the plurality of distance values to the reference value...***"

[1] e.g., specification, p. 15-16, and Figs. 6-7.

Amended independent Claim 7 recites substantially similar features, but is directed to a method for correcting a three-dimensional transparent body using similar steps to those recited in Claim 1.

Briefly summarizing, in a non-limiting exemplary embodiment, the grid distance ratio is a value obtained by dividing each of the plurality of grid distances by the same reference value in the row or column containing the grid distance. Thus, regardless of whether a series of grid distances are uniformly large or uniformly small across a plurality of grid points of the "orthogonal grid pattern," the grid distance ratio is represented as even or uniform indicating a low level of dynamic perspective distortion. Alternatively, when inspection is performed and a series of grid distances vary across a series of grid points of the "orthogonal grid pattern," the grid distance ratio is schematically represented as uneven indicating a high level of dynamic perspective distortion

When the dynamic perspective distortion is high, indicating a variation of grid distance values over a set of adjacent orthogonal grid pattern points, the human eye may detect a flicker. The claimed invention is developed to detect and eliminate this flicker effect by detecting and reducing the dynamic perspective distortion in a transparent body over a large range of evaluation points.

Turning to the applied reference, Kurumisawa describes a method for measuring the optical distortion of windshield glass by evaluating the contrast between a white and black checkered pattern image viewed through the glass.[2] Specifically, Kurumisawa describes that a focal plane shift may be detected at a single point by determining the contrast between a single white and black portion of the pattern.[3]

However, Kurumisawa fails to teach or suggest ***obtaining a plurality of distance values*** between adjacent perspective evaluation points, determining a ***reference value***, among

[2] Kurumisawa, Abstract.
[3] Id., Fig. 5, p. 300, col. 2, lines 1-24.

the plurality of distance values, and ***evaluating the dynamic perspective distortion of the transparent body by obtaining ratios of each of the plurality distance values to the reference value***, as recited in independent Claim 1. Further, in Kurumisawa, it is possible to evaluate distortion only in a localized area, and not possible to make evaluation in a wide rage, such as vertical regions and lateral regions, as in the claimed invention.

As discussed above, Kurumisawa observes the contrast between a white and black part of the checkered pattern, and determines that a certain degree of distortion is present based on this observed contrast. As depicted in Fig. 5, and described at p. 300, col. 2, of Kurumisawa, a luminous intensity is determined at each white and black edge in the checkered pattern, and the contrast is defined as the variation in the luminous intensity detected at the edge (e.g., Contrast = $(I_{max} - I_{min})/(I_{max} + I_{min})$). Thus, Kurumisawa does not ***obtain a plurality of distance values between a plurality of adjacent perspective evaluation points***, whatsoever. Instead, Kurumisawa only describes that a difference in luminous intensity is determined to calculate a contrast value, which is analyzed to determine distortion.

Further, Kurumisawa fails to teach or suggest determining a ***reference value, among the plurality of distance values***, and evaluating the dynamic perspective distortion of the transparent body by ***obtaining ratios of each of the plurality of distance values to the reference value***. As noted above, Kurumisawa fails to teach or suggest obtaining a plurality of distance values between evaluation points. Additionally, the outstanding Official Action cites the value "I_{min}" as a reference value, and states that the equation used to calculate contrast in a single black/white intersection point is analogous to obtaining ratios of distance values to the reference value. However, as noted above, independent Claim 1 is amended to clearly recite that ***the reference value*** is determined ***among a plurality of distance values***, and that ***ratios of each of the plurality of distance values*** are obtained in relation ***to the***

reference value. Thus, only one reference value from the plurality of distance values is used to calculate the ratios. In contrast, the equation to determine contrast in Kurumisawa describes only that a single black/white intersection is examined, not a plurality, and the reference value for that specific intersection is the minimum luminous intensity at that specific intersection. Thus, a plurality of black/white intersections are not calculated using the same reference value selected from a plurality of measured distance points, as recited amended independent Claim 1.

Generally, dynamic perspective distortion evaluates differences in images of the same object viewed through respective parts of a glass sheet, or otherwise stated, the dynamic perspective distortion evaluates the distortion of a glass sheet, detected by a driver or passenger when his or her view changes. It is impossible to evaluate dynamic perspective distortion based only on information on localized distortion of a glass sheet, as described in Kurumisawa, because even if a bad evaluation is locally obtained the dynamic perspective distortion over a larger area of the glass may not be poor because the distortion may be uniform, as discussed above.

Thus, in Kurumisawa, the distribution of distortion throughout a surface cannot be evaluated since only localized black/white intersections are evaluated using a contrast measurement which includes the minimum luminous value as the "reference value". Accordingly, the evaluation method according to Kurumisawa cannot determine whether a driver or a passenger feels the occurrence of dynamic perspective distortion when his or her view changes.

Accordingly, Kurumisawa fails to teach or suggest obtaining a ***plurality of distance values*** between a plurality of adjacent perspective evaluation points, determining a ***reference value, among the plurality of distance values***, and evaluating the dynamic perspective

distortion of the transparent body by ***obtaining ratios of each of the plurality of distance values to the reference value***, as recited in amended independent Claims 1 and 7.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-3, 5-9, 11 and 12 is patentably distinguishing over the applied references. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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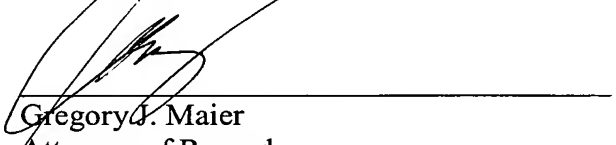

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